

2008 FLOOD RECOVERY UPDATE

15 June 2009

Executive Summary

The U.S. Army Corps of Engineers, Rock Island District (the District) is currently engaged in recovery operations for the June 2008 flooding. The District experienced severe flooding over most of its area of operations. Over 200 counties in five states were heavily impacted by the flooding which caused levee overtoppings at over a dozen sites. The District responded during the flood by deploying nearly 300 employees throughout the system to provide technical and flood fight command support, and provided nearly 13 million sandbags, 100 pumps, and over 30 miles of plastic to assist local communities and levee districts in their flood fight effort. Federal infrastructure was also heavily damaged by the flooding to include District reservoirs and recreation sites, wildlife areas, and the locks and dams along the Mississippi and Illinois Rivers.

Repairs to flood-damaged levee systems & flood control projects within the 78,000 square-mile jurisdiction of the District following a flood event are authorized by Public Law 84-99 (PL 84-99). To be eligible for Corps assistance under PL 84-99, a levee system or flood damage reduction project must be inspected and certified by the Corps of Engineers to be able to provide the design level of protection. Corps assistance to repair flood damaged levees is limited to major flood disaster(s) resulting in life-threatening or property damaging situations.

The District also experienced extensive flood damage to federally owned and operated project sites. District sites that have experienced damage include locks and dams 11-22, Illinois Waterway Locks and dams and our Iowa reservoirs — Coralville, Red Rock, and Saylorville. Most of the lock and dam facilities in the District were inundated from high river elevations and experienced some degree of damage. Funding has been provided for repairs to our Mississippi River locks and dams. Our reservoirs experienced flood damage from above or near record pool levels, inflows, and outflows with overtopping of emergency spillways.

In cooperation with USACE Headquarters and Division leadership and partner agencies at the local, state, and federal level, the District is fully engaged with flood recovery operations for both the levee system and District facilities. While all levee flood recovery work may take several years to complete, it is the District's goal to have all breaches closed by 21 March 2009. Government facility repair work is being prioritized and performed based on risk levels caused by the damages.

The U.S. Army Corps of Engineers is also leading the development of a collaborative regional approach to the long-term restoration of flood management systems damaged by the Midwest Floods of June 2008. The Corps is working with the Federal Emergency Management Agency and other federal, state and local agencies to assemble a Regional Interagency Levee Task Force (ILTF) to provide a uniform approach across the region impacted by the Midwest floods. The task force is an umbrella organization designed to look at flood plain management at a regional level and includes representatives from federal and state agencies. Interagency Levee Work Groups (ILWG) will operate in state Joint Field Offices to review assistance requests from local entities, evaluate non-structural alternatives for levee repairs (creation of expanded floodways and ecosystems), and participate in the levee restoration process.

PL84-99 LEVEE RECOVERY

DSR = Damage Survey Report

PIR = Project Information Report

Overview

Levees Damaged w/Request for Assistance	DSR's Complete	PIR's Complete	Estimated Repair Cost
40	35	24	

Levee Breach Repair — Dredge Data

30 total MVR breaches

All levee breaches eligible for structural levee repairs have been closed. Two remaining breaches at Louisa #11 are anticipated to be repaired through a non-structural option.

- Green Island 100% (1 of 1)
- Two Rivers 100%* (2 of 2)
- Henderson 1 & 2 100% (2 of 2)
- Union Township 100% (5 of 5)
- Gregory 100% (8 of 8)
- Miss/Fox 100% (5 of 5)
- Hunt/Lima 100% (2 of 2)
- Indian Grave 100% (3 of 3)
- Louisa #11 0% (0 of 2)

*The dredging contract bid opening was held on 01 May 2009 for permanent repairs on the Iowa River.

Pump Repairs

25 total pump repairs

- 6 operational
- 19 non-operational
- 8 of 8 contracts in place for repairs

Project	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Two Rivers - 3 pumps for repair	5-Dec-08	3-Feb-09	02-Jul-09	
Union Township - 3 pumps for repair	16-Jan-09	19-Feb-09	7-Nov-09	
Henderson #2 - 3 pumps for repair	25-Nov-08	10-Sep-08	30-Jul-09	
Gregory - 3 pumps for repair	11-Dec-08	16-Jan-09	16-Sep-09	
Lima Lake - 5 pumps for repair	19-Dec-08	5-Dec-08	23-Sep-09	
Hunt- 3 pumps for repair	18-Nov-08	20-Nov-08	31-Jan-10	
Ottumwa - 2 pumps for repair	1-Jan-09	13-Jan-09	13-May-09	
Indian Grave - 3 pumps for repair	5-Dec-09	30-Jan-09	31-Aug-09	

Levees with Approved PIR's

1. Henderson County Drainage Districts 1 & 2 (Illinois)

- Request for Assistance — 25-Jun-08
- DSR complete
- PIR complete
- Work – Breach Repair; Pump Station Repair; Levee Repair
- Scheduled Bid Openings

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Henderson #2 Breach Repair	8-Sep-08	8-Sep-08	28-Nov-08	2-Dec-08
Henderson #2 Site Prep	11-Sep-08	9-Sep-08	26-Sep-08	25-Sep-08
Henderson #1 Breach Repair	25-Nov-08	28-Nov-08	31-Dec-08	6-Dec-08
Henderson #1 and #2 Erosion/Scour Repairs	2-Apr-09	22-Jun-09	31-Jul-09	
Pump Station Evaluation and Repair	25-Nov-08	10-Sep-08	30-Jul-09	
Henderson #2 Seepage Berm	17-Mar-09		27-Mar-09	

2. Hunt Drainage District and Lima Lake Drainage District (Illinois)

- Request for Assistance — 10-Jul-08
- DSR complete
- PIR complete
- Work – Breach Repair; Pump Station Repair; Levee Repair; Access Road Repair
- Scheduled Bid Openings

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Breach Repair (Canton Ferry and LD 20)	22-Oct-08	22-Oct-08	14-Feb-09	16-Apr-09
Breach Repair (Through LD 20)	28-Oct-08	28-Oct-08	30-Jun-09	
Hunt Pump Station Repairs	18-Nov-08	20-Nov-08	31-Jan-10	
Lima Lake Pump Station Repairs	19-Dec-08	5-Dec-08	23-Sep-09	
Hunt Pump Station Repair (Unwatering)	3-Dec-08	3-Dec-08	3-Jul-09	
Lima Lake Pump Station Repair (Unwatering)	3-Dec-08	3-Dec-08	3-Jul-09	
Wave Wash Damage Repairs	20-Mar-09		15-Jan-10	
Seeding Sand Levees	3-Apr-09		29-Jan-10	
Access Road Damage Repair	17-Apr-09		12-Feb-10	

3. Indian Grave (Illinois)

- Request for Assistance — 23-Jun-08
- DSR complete
- PIR complete
- Work – Breach Repair, Pump Station Repair, Levee Repair
- Scheduled Bid Openings

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Breach Repair	22-Oct-08	22-Oct-08	15-Jan-09	25-Mar-09
Diesel Engine Damage Assessment	26-Sep-08	26-Sep-08	30-Oct-08	30-Oct-08
Initial Pump Station Repairs	24-Nov-08	21-Nov-08	4-Apr-09	27-Mar-09
Final Pump Station Repairs	5-Dec-08	30-Jan-09	31-Aug-09	
Pump Station Repair (Unwatering)	3-Dec-08	3-Dec-08	3-Jul-09	
Wavewash Repair Dredging - Stockpile	30-Mar-09	30-Mar-09	15-Apr-09	
Wavewash Repairs	30-May-09		30-Sep-09	

4. Two Rivers (Iowa)

- Request for Assistance — 23-Jun-08
- DSR complete
- PIR complete
- Work - Repair two levee breaches and two pump stations. Construct temporary levee near Iowa River. Repair levee wavewash and erosion areas.

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Temp Levee	2-Jul-08	2-Jul-08	23-Jul-08	21-Jul-08
Temp Levee Raise	1-Dec-08	9-Dec-08	31-Dec-08	24-Dec-08
Miss. River Breach Repair	15-Aug-08	18-Sep-08	30-Nov-08	10-Nov-08
Iowa River Breach Repair - Site Prep Contract	1-Apr-09		1-Jun-09	
Iowa River Breach Repair - Dredge Work Contract	1-May-09		1-Sep-09	
Iowa River Breach Repair - Mitigation Contract	1-Sep-09		1-Nov-09	
Initial pump station repairs #2 and #4	11-Aug-08	23-Sep-08	28-Nov-08	12-Dec-08
Final pump station repairs #2 and #4	5-Dec-08	3-Feb-09	2-Jul-09	

5. Union Township (Missouri)

- Request for Assistance — 16-Jul-08
- DSR complete
- PIR complete
- Work - Breach Repair; Pump Station Repair; Levee Repair

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Breach #2 - Dubuque Crew	15-Dec-08	15-Dec-08	28-Dec-08	24-Dec-08
Breach #3 - Goetz Crew	20-Oct-08	24-Oct-08	4-Nov-08	4-Nov-08
Breach #4 - Goetz Crew	25-Aug-08	25-Aug-08	6-Sep-08	6-Sep-08
Breach #6 - Dubuque Crew	10-Nov-08	19-Nov-08	11-Dec-08	13-Dec-08
Wave Wash – Dredge Contract	29-May-09		6-Nov-09	
Wave Wash – Equipment Rental	8-Jun-09		4-Dec-09	
Pump Station Repairs	16-Jan-09	19-Feb-09	7-Nov-09	

6. Gregory (Missouri)

- Request for Assistance — 7-Aug-08
- DSR complete
- PIR complete
- Work - Repair eight levee breaches, Railroad closure and realignment, overtopping/wave wash damage and one pump station.

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Restore Fox River Breaches 1-3	12-Nov-08	9-Nov-08	31-Dec-08	12-Dec-08
Restore Mainstem Breaches 4-7	18-Nov-08	8-Dec-08	30-Mar-09	06-Mar-09
Restore Breach 8	18-Nov-08	8-Dec-08	30-Mar-09	06-Mar-09
Railroad Closure Realignment	19-Jan-09		13-Nov-09	
Pump Station Repairs	11-Dec-08	12-Jan-09	16-Sep-09	
Overtopping & Wavewash Repairs	18-Mar-09		15-Oct-09	

7. Mississippi-Fox (Missouri) (PROJECT COMPLETE)

- Request for Assistance — 7-Jul-08
- DSR complete
- PIR complete
- Work - Breach Repair of five breaches; Levee Repair

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Breach and Wave Wash Repair	15-Dec-08	15-Dec-08	15-Feb-09	1-Feb-09
Reseeding	1-Apr-09	1-May-09	1-May-09	11-May-09

8. Canton (Missouri) (PROJECT COMPLETE)

- Request for Assistance — 7-Jul-08
- DSR complete
- PIR complete
- Work - Levee Repair

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Levee Repair	15-Dec-08	4-Feb-09	16-Sep-09	04 Jun 09

9. Des Moines, IA LFPP (Iowa) (PROJECT COMPLETE)

- Request for Assistance — 7-Jul-08
- DSR complete
- PIR complete
- Work - Levee Repair

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Levee Repair	10-Nov-08	1-Dec-08	23-Dec-08	16-Dec-08

10. Ottumwa (Iowa) (PROJECT COMPLETE)

- Request for Assistance — 16-Jul-08
- DSR complete
- PIR complete
- Work – Riprap repair, pump station repair, debris removal, and levee scour repair.

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Levee Repair	1-Jan-09	13-Jan-09	13-May-09	23-Apr-09
Pump Station Repair	1-Jan-09	13-Jan-09	13-May-09	23-Apr-09

11. Green Island / Roger Tarr (Iowa) (PROJECT COMPLETE)

- Request for Assistance — 3-Jul-08
- DSR complete
- PIR complete
- Work - Breach repair; Levee Repair

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Breach Repair	3-Dec-08	8-Dec-08	15-Dec-08	17-Dec-08

- \$84,000 estimated costs

12. Cascade (Iowa) (PROJECT COMPLETE)

- Request for Assistance — 14-Jul-08
- DSR complete
- PIR complete
- Work - Levee Repair

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Levee Repair	16-Nov-08	16-Jan-09	19-Feb-09	19-Feb-09

13. South River (Missouri)

- Request for Assistance — 7-Jul-08
- DSR complete
- PIR complete
- Work - Levee Repair

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Levee Repair	1-May-09	19-May-09	15 Aug-09	

14. Sny Island (Illinois)

- Request for Assistance — 17-Jul-08
- DSR complete
- PIR complete
- Work - Levee Repair

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Levee Repair	13-Oct-09		29-Jun-10	

15. Bay Island (Illinois)

- Request for Assistance — 11-Jul-08
- DSR complete
- PIR complete
- Work - Levee Repair

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Levee Repair	--		13-Aug-09	

16. Green Bay (Iowa)

- Request for Assistance — 17-Jul-08
- DSR complete
- PIR complete
- Work - Levee Repair

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Levee Repair	--		29-Jun-09	

17. Marshalltown (Iowa)

- Request for Assistance — 1-Jul-08
- DSR complete
- PIR complete
- Work - Levee Repair

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Levee Repair	11-Jun-09		30-Sep-09	

18. Waterloo (Iowa)

- Request for Assistance — 19-Jun-08
- DSR complete
- PIR complete
- Work - Levee Repair

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Levee Repair	30-Jan-09	1-Apr-09	1-Aug-09	

19. Elkader (Iowa) (PROJECT COMPELTE)

- Request for Assistance — 2-Jul-08
- DSR complete
- PIR complete
- Work - Levee Repair

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Levee Repair	16-Nov-08	13-Jan-09	19-Feb-09	20-Feb-09

20. Fabius River (Missouri)

- Request for Assistance — 1-Jul-08
- DSR complete
- PIR complete
- Work - Levee Repair

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Levee Repair	29-May-09		29-Jun-09	

21. Evansdale (Iowa)

- Request for Assistance — 12-Nov-08
- DSR complete
- PIR complete
- Work - Levee Repair

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Levee Repair	30-Jan-09	1-Apr-09	1-Jul-09	

22. Burlington Northern, LFPP (Iowa)

- Request for Assistance — 13-Jan-09
- DSR complete
- PIR complete
- Work - Levee Repair

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Levee Repair	24-Jul-09		24-Aug-09	

23. Louisa #11 (Iowa)

- Request for Assistance — 30-Jun-08
- DSR complete
- PIR complete
- Work - Breach repair; Levee Repair

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Breach and Levee Repair	2-Oct-09		11-Jan-10	

Levee PIR Development List

(The following may not be inclusive of all remaining PL 84-99 project work within the Rock Island District)

24. Keokuk (Iowa)

- Request for Assistance — 14-Jul-08
- DSR complete
- PIR ongoing
- Work - Levee Repair

Construction Milestones	Start Dates		Finish Dates	
	Schedule	Actual	Scheduled	Actual
Levee Repair	TBD		TBD	